



AMBER

ATSC Digital TV Processor

The AMBER TNM-406x, third generation of Thales' Remultiplexer and Processor, is the ideal device for operators to effectively manage digital TV programs.

Versatile and cost effective, AMBER combines advanced PSIP processing capabilities with highly integrated and powerful remultiplexing features, making it the most reliable 1RU platform on the market today.

Key Benefits

- Most compact and efficient MPEG-2 remultiplexer in the industry
- Input/Output bit rates up to 180 Mbps with 1 bps accuracy
- Built-in ASI & SMPTE-310M outputs
- Remultiplexing of up to 8 ASI & 7 IP/Ethernet transport streams
- Optional QPSK built-in or 8VSB front-ends
- Superior management of PSI/PSIP tables
- ATSC PSIP rebranding
- Broadcast-to-Cable PSIP translation
- IP encapsulation/de-encapsulation
- Opportunistic data insertion
- Bandwidth optimization & overflow prevention
- Easy configuration via Web/Ethernet interface or front panel keypad
- Fits into Thales' Web Network Management System, LAZULITE

AMBER ATSC DIGITAL TV PROCESSOR

Overview

AMBER, is a versatile, cost-effective re-multiplexer combining advanced ATSC/PSIP processing with a wide range of functionalities.

AMBER provides service deletion, service insertion, local data insertion (PSIP tables, Electronic Program Guides, IP, interactive applications...), bandwidth management and optimization.

In a 1RU chassis, AMBER can host up to 8 ASI inputs, as well as 2 GPSK or 8VSB front-ends.

Superior Configuration & Supervision

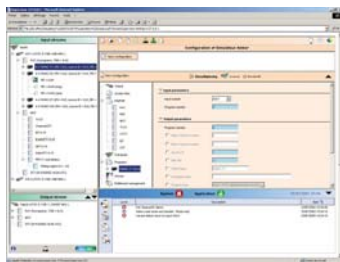
Configuration and supervision can be easily accessed by any standard Web browser. Configuration is straightforward, using the simple drag & drop concept and an advanced statistics display.

An embedded SNMP Agent is available for centralized management of configuration and monitoring.

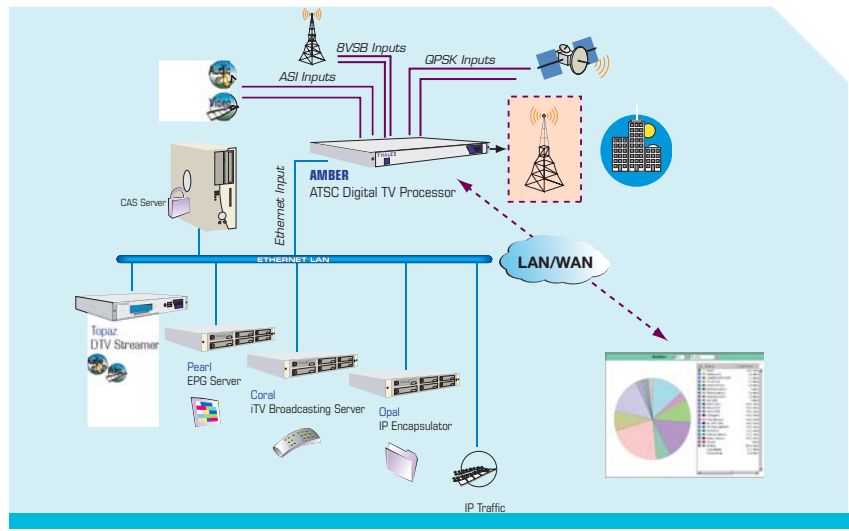
Additionally, AMBER fits into Thales' Web Network Management Solution, LAZULITE.

Multiplex Bandwidth Management & Overflow Prevention

In cases where incoming variable bit rate services are present, the operator can set priorities and identify the re-multiplexed services to be smoothed to prevent re-multiplex overflow.



AMBER Configuration and Supervision Software



AMBER Environment

PSIP Rebranding

Various management modes allow full control of PSIP information, from automatic generation (for static PSIP management) to injection of sections generated by Thales' PEARL PSIP server.

Easy access to branding parameters is provided to tune, for instance channel names or major/minor numbers.

PSIP Protection & PSI Reconciliation

If an external PSIP server is connected to the equipment, AMBER ensures that the main PSI/PSIP information is permanently generated, even in case of failure of the PSIP server, thanks to its internal memory storage.

Furthermore, AMBER guarantees the information contained in the PSI and the PSIP remains coherent, in case of program contents change.

Broadcast-to-Cable Translation

In order to facilitate the carriage of PSIP into cable systems, AMBER tailors the signaling information for cable, allowing for instance to dynamically create cable-specific signaling or automatically reduce the amount of PSIP data carried on the cable plant.

Dynamic Configuration Changes

The AMBER configuration may be changed at any time without disturbing the rest of the multiplex. Multiple configurations can be stored

on the equipment and activated via GUI, GPI, configuration scheduler, SNMP and SCTE35 in-band triggers.

Opportunistic Data Insertion

AMBER Opportunistic Data Insertion (O.D.I) allows broadcasters to optimize bandwidth utilization. AMBER fills the residual bandwidth with IP, or interactive data coming from Thales' IP encapsulators or iTV data servers.

AMBER also features an optional IP MPE encapsulation/de-encapsulation capability for simple datacasting and IP routing purposes.

Physical Characteristics

- 19" rack, 1U high
- Redundant power supply option
- 18 LEDs for quick status detection
- Power and alarm LEDs on front panel
- LCD screen and keypad for an easy access to AMBER parameters
- Free voltage contacts

Ordering Information

Ordering number	Description
TNM-4062-A	2 ASI inputs
TNM-4064-A	4 ASI inputs
TNM-4068-A	8 ASI inputs

Please contact Thales at the numbers below for further details on AMBER's available options.